E Engin
Lafon

January, 1952

THE Petroleum Engineer

Vol. 24, No. 1
Part 2

EAST ENGIN.
LIBRARY

TN
860
P491s-

INDEX to Vol. XXIII

From January, 1951 to December, 1951, Inclusive

SUBJECT INDEX

TITLE OF ARTICLE AND AUTHOR	Decimal No.	No.	Mo.	Year	Page
GENERAL					
Freedom's Oil, Ernest O. Thompson	000.	13	Dec.	1951	A-33
American Petroleum Institute, Thirty-First Annual Meeting	023.1	12	Nov.	1951	A-33
The Effect of Patents on Petroleum Production, Operation, and Development, Paul F. Hawley	070.	1	Jan.	1951	B-13
Oil Women Form Own Organization, Mary Morris	090.	9	Aug.	1951	A-58
Where Is All the Steel Going Today, Bennett S. Chapple, Jr.	094.1	10	Sept.	1951	A-56
How to Recondition Pipe, Richard Sneddon	094.11	10	Sept.	1951	B-37
Duplex Tubing for Use in the Petroleum Industry, C. L. Bulow	094.16	10	Sept.	1951	C-5
Shovel Crane Service, A. E. York	094.99	11	Oct.	1951	A-58
GEOGRAPHICAL					
Oil in the Far East, William E. V. Abraham	100.	3	Mar.	1951	A-56
Oil an Gas in Italy	101.136.	2	Feb.	1951	A-50
Economic Significance—Secondary Operations and Reserves in the Eastern States, Paul D. Torrey	111.1.001	1	Jan.	1951	B-36
Some Operating Problems in Old Limestone Reef Fields, K. Marshall Fagin	111.34	1	Jan.	1951	B-62
The Spirit of Spindletop, B. Brewster Jennings	111.4	8	July	1951	E-27
Geology and Oil and Gas Development and Possibilities of the Williston Basin, Donald F. Towse	111.40	12	Nov.	1951	A-49
Drilling and Completion Practices in the Church Buttes Field, W. C. Dinger	111.52	7	July	1951	B-16
The Worland, Wyoming Field, J. I. Morris	111.52	8	July	1951	B-77
California Oil, R. L. Minckler	111.61	8	July	1951	A-33
Oil Operations of the Long Beach Harbor Board, Richard Sneddon	111.61	11	Oct.	1951	B-63
Canada's Progress in 1950, L. O. Rowland	113.	1	Jan.	1951	B-51
Outlook for Latin American Oil Development, Lester C. Uren	120.	1	Jan.	1951	A-47
An Oil Man in Latin America	120.	4	April	1951	B-73
The De Mares Concession, David Donoghue	123.	3	Mar.	1951	A-39
Oil in Brazil, Parts 1 and 2, Joseph E. Pogue	127.	9	Aug.	1951	A-43
Oil in Brazil, Parts 3 and 4, Joseph E. Pogue	127.	10	Sept.	1951	A-46
A U. S. View of Oil Conditions in Europe, Fritz Huntsinger	130.	3	Mar.	1951	A-53
A Study of Soviet Oil Industry	131.	10	Sept.	1951	B-88
Exploration Operations in Pakistan	144.	12	Nov.	1951	B-12
Petroleum and Natural Gas in Japan, Leo W. Stach	146.	6	June	1951	A-48
PHYSICAL AND CHEMICAL PROPERTIES OF PETROLEUM					
Diesel Oil Cold Tests and Method for Cloud Point Determination, Y. C. Young	214.5	10	Sept.	1951	C-40
From Oil and Gas Come 400,000 Tons Sulfur a Year, Arch L. Foster	223.92	12	Nov.	1951	C-3
Maintenance of Internal Combustion Engines—Filtration of Air and Oil, Philip H. Moore	252.	7	July	1951	C-113
Improved Spark Timing Light	263.1	8	July	1951	C-53
Octane Numbers Show Downward Trend	263.11	9	Aug.	1951	C-46
EXPLORATION AND PROSPECTING FOR PETROLEUM					
Development of the Susan Peak Field, D. W. Graham	305.	12	Nov.	1951	B-7
A New Kentucky Oil Pool, Willard Rouse Jillson	305.15	13	Dec.	1951	B-11
Underground Magnetic Logging Device	306.39	6	June	1951	B-87
Synthetic Fuels Plant in Shakedown Stage, Arch L. Foster	314.	2	Feb.	1951	C-29
Connate Water Determinations and Utilization of Such Data, E. J. Simmons	343.	3	Mar.	1951	B-68
Structure Test Hole Drilling, Arnold E. Campbell	364.	3	Mar.	1951	B-64
The Relationship Between Electrical Resistivity and Brine Saturation, Lee S. Carter	367.3	12	Nov.	1951	B-60
A Seismic Research Laboratory on Wheels, W. E. Pugh	368.2	11	Oct.	1951	B-78
Flying Magnetometer Survey Near Gulf of Venezuela	368.3	5	May	1951	B-70
DEVELOPMENT OF FIELDS					
Developing Natural Gas Field	400.	10	Sept.	1951	B-90
How Two-Way Radio Aids in Drilling, Paul A. Greenmeyer	405.4	6	June	1951	B-40
Notes on the Well Spacing Problem, G. W. Tomlinson	410.	12	Nov.	1951	B-88
DRILLING					
Optimum Use of Coring, Electric Logging, and Other Testing Methods in Exploratory Wells, Part 1, John E. Walstrom	420.1	2	Feb.	1951	B-52
Optimum Use of Coring, Electric Logging, and Other Testing Methods in Exploratory Wells, Part 2, John E. Walstrom	420.1	3	Mar.	1951	B-35
U. of T. Research Center, Fred D. Thompson	420.111	6	June	1951	B-50
Effective and Total Porosity in the Redwater Dc Reservoir, Alberta, Canada, Walter Rose Hugh Hay-Roe, R. G. Knabe, and F. M. Tunnell	420.111	11	Oct.	1951	B-14
Radioactivity Well Logging Anomalies, John L. P. Campbell	420.112	6	June	1951	B-7
Straight-Hole Drilling in Crooked-Hole Country, G. C. MacDonald and Arthur Lubinski	420.4	5	May	1951	B-54
The Wire-Line Pressure Setting Assembly as Used to Set Tools Having Opposed Slips, C. A. Greve	422.	8	July	1951	B-72
Drilling Equipment Design	422.	12	Nov.	1951	B-96
New Welded Full View Mast, J. B. McCormick	422.	13	Dec.	1951	B-62
Heavy Portable Drilling Rig for Foreign Operations, R. E. Norton and William Ohlandt, Jr.	422.12	11	Oct.	1951	B-40
Muffler Arrangement for Engines, J. C. Albright	422.34	3	Mar.	1951	B-52
Trouble Shooting, Harold H. Hall	422.343	10	Sept.	1951	B-68
Submersible 1800-Hp Drilling Barge Operates in Corpus Christi Bay, G. Otis Danielson	422.912.5	6	June	1951	B-14
Drilling and Completion Practices in the Church Buttes Field, W. C. Dinger	425.	7	July	1951	B-16
Evaluation of Rotary Drilling Lines, J. U. Teague	425.	13	Dec.	1951	B-73
Drilling Equipment, M. F. Hazel	425.2	4	April	1951	B-16
Power Equipment Revolutionizes Drilling Operation	425.2	9	Aug.	1951	B-67
West Texas Preview of Tomorrow's Oil Well Rigs and Drilling Methods, Richard Sneddon	425.21	7	July	1951	B-60
Power at the Bottom of the Hole, Ernestine Adams	425.214	12	Nov.	1951	B-71
A Three-Dimensional Photoelastic Stress Analysis of a Threaded Drill Pipe Joint, William F. Franz	425.215	2	Feb.	1951	B-60
Fatigue Testing and Development of Drill Pipe-to-Tool Joint Connections, William S. Bachman	425.215	2	Feb.	1951	B-36
Improvements in Metallurgy and Design Reduce Failures of Drill String Tools, Frank Briggs	425.215	5	May	1951	B-7
Down-the-Hole Pressure Surges and Their Effect on Loss of Circulation, W. C. Goins, Jr., J. P. Weichert, J. L. Burba, Jr., D. D. Dawson, Jr., and A. J. Teplitz	425.218	10	Sept.	1951	B-73
Slush Pump History and Possible Developments, Roy E. Edwards	425.218.1	13	Dec.	1951	B-40
Good Mud Control Saves Pipe, H. I. Bussa and F. B. Vick	425.218.4	13	Dec.	1951	B-7
Oil-Emulsion Drilling Fluids, H. W. Perkins	425.218.41	4	April	1951	B-60
Improved Drilling Fluid Filter Loss Tester, J. F. Chittum, M. B. Standing and W. T. Cardwell, Jr.	425.218.41	11	Oct.	1951	B-84
Reversible Connections for Rig Shifts, Elton Sterrett	425.22	6	June	1951	B-48
Collar Type Elevator in Deep Casing Operations, W. A. Wilson	425.222	5	May	1951	B-76
Ultra-Modern Diesel Electrical Rig Combines Flexibility and Portability, Richard Sneddon	425.23	5	May	1951	B-13
Modern Rig Powered by Steam Engine, K. Marshall Fagin	425.231	5	May	1951	B-38
New Skid-Mounted Rig Offers Compactness	425.232	5	May	1951	B-81
Large Portable Rig, K. Marshall Fagin	425.232	9	Aug.	1951	B-14

TITLE OF ARTICLE AND AUTHOR	Decimal No.	No.	Mo.	Year	Page
Lost-Circulation—A New Fibrous Material for Its Correction, E. E. Glenn, Jr., and R. Jenkins	425.25	11	Oct.	1951	B-7
Lost Circulation—Causes and Remedies, H. J. Shumate	425.25	12	Nov.	1951	B-81
New Developments in Diamond Coring, Robert A. Watson	427.1	6	June	1951	B-63
Crooked Holes, Bruno Schabarum	429.21	13	Dec.	1951	B-16
Allowable Loads on an Unsupported Casing, J. A. Reed, II and H. H. Meredith, Jr.	432.	8	July	1951	B-32
Casing String Design Principles and Practices, Part 1, J. O. Hills	432.2	6	June	1951	B-70
Casing String Design Principles and Practices, Part 2, J. O. Hills	432.2	7	July	1951	B-42
Prediction of Corrosion in Oil and Gas Fields, D. A. Shock and J. D. Sudbury	432.6	8	July	1951	B-86
Casing Failures Traced to Bacterial Action, Richard Sneddon	432.6	9	Aug.	1951	B-7
Weather Radar and Offshore Operations, W. W. Hildreth, Jr.	442.91	7	July	1951	B-7
Physical Properties of Gel-Cement, Dwight K. Smith	444.	4	April	1951	B-7
Cementing Surface Casing, Bruce Barkis	444.	12	Nov.	1951	B-54
Investigation of Torque Converter Drives on Mud Pumps, David F. Toomey and Ernest G. Chilton	446.3	10	Sept.	1951	B-45
Well-Completion Practices, T. A. Huber, T. O. Allen, and G. F. Abendroth	450.	4	April	1951	B-36
Dual Completion Practices in Alberta, Paul C. Evans	450	10	Sept.	1951	B-60
Well Completion Practices in Oklahoma, K. Marshall Fagin	459.5	3	Mar.	1951	B-54
Selection and Evaluation of Wells for Hydrafrac Treatment, Joe W. Maly and Tom E. Morton	459.6	6	June	1951	B-28

PRODUCTION

Data of Capillary and Non-Capillary Flow, Stanley C. Herold	501.	12	Nov.	1951	B-14
Salt Water Injection Projects in Oklahoma, K. Marshall Fagin	501.61	4	April	1951	B-72
Water Drained Automatically From Lube Oil Reservoir, J. C. Albright	501.61	10	Sept.	1951	B-84
Water Drive Reservoir Performance Vedder Pool, Wasco Field, N. Van Wingen	501.732	8	July	1951	B-11
Graphical Solution of Single Phase Flow Problems, E. R. Brownscombe and Loyd R. Kern	501.75	2	Feb.	1951	B-7
Graphical Method of Evaluating Performance of Oil Well Sucker Rods, J. P. Peretti	514.31	13	Dec.	1951	B-30
Development of the Spangseal Tubing Joint, J. L. Holmquist	514.41	7	July	1951	B-54
Principles of Gas Anchor Design, Norman C. Wells	514.42	11	Oct.	1951	B-48
Design of Oil Well Pumps, Marshall C. Turner	514.5	9	Aug.	1951	B-35
Gas Lifting by Continuous Flow, C. D. Fletcher and M. M. Livingston	515.11	9	Aug.	1951	B-42
Well Pump Control Center, E. H. Hulse	516.3	2	Feb.	1951	B-12
Three Pumping Units Operated by One Engine, J. C. Albright	516.41	2	Feb.	1951	B-32
Installation of Pumping Units, Kenneth N. Mills	516.5	2	Feb.	1951	B-14
Sand and Gas Control in Pumping Wells, Norman C. Wells	517.2	5	May	1951	B-48
A New Inhibitor for Sulfide Corrosion, J. A. Caldwell	531.	3	Mar.	1951	B-58
Counterbalancing of Beam Pumping Units, Douglas O. Johnson	531.	8	July	1951	B-48
The Role of Workovers in Coastal Texas and Louisiana, Sidney A. Judson	532.	11	Oct.	1951	B-104
Do's and Don't for Well Pullers, Richard Sneddon	532.	12	Nov.	1951	B-42
Workovers in West Texas, T. W. Kidd	532.	13	Dec.	1951	B-55
Soluble Plug Systems Used to Control Paraffin Deposition, K. Marshall Fagin	532.2	6	June	1951	B-54
Studies and Experiments With Paraffin Prevention and Removal in Wells in Southeastern Ohio, John C. Wright	532.2	8	July	1951	B-3
Hydrafrac Methods for Limestone and Dolomite Wells, C. E. Clason	532.91	11	Oct.	1951	B-53
Shannon Sand Reservoir Cole Creek Field, Wyoming, E. J. Whitaker and D. T. Hoenshell	533.	8	July	1951	B-42
Helium Tracer Gas Studies, E. M. Frost, Jr.	533.2	3	Mar.	1951	B-7
Calibration Characteristics of Sub-surface Pressure Gages, R. V. Smith, E. J. Dewees, and R. H. Williams	533.4	1	Jan.	1951	B-7
New and Suggested Techniques for Improving the Recovery of Oil, Paul D. Torrey	537.	8	July	1951	E-2
Production History of Main Western Pool, North Coles Levee Field, W. J. Travers, Jr. and F. T. Lloyd	537.5	11	Oct.	1951	B-92
Pulsation Snubbers, J. R. Bailey	537.5	13	Dec.	1951	B-50
Fracture Contact Affects Energy Behavior Between Wells, F. R. Cozzens	537.6	7	July	1951	B-35
History of Water-Flooding, Harry H. Power	538.	7	July	1951	A-33
New and Suggested Techniques for Improving the Recovery of Oil, Paul D. Torrey	538.	8	July	1951	E-2
Results From Increased Flooding Pressures, E. T. Heck and J. C. Vaughn	538.	8	July	1951	B-64
Water Injection, Thomas P. Harris	538.	11	Oct.	1951	B-72
Water Flood Produces Million Barrels Oil	538.2	12	Nov.	1951	B-99
Additional Oil Production Through Flooding With Carbonated Water, James Wellford Martin	538.25	9	Aug.	1951	B-58
New and Suggested Techniques for Improving the Recovery of Oil, Paul D. Torrey	538.9	8	July	1951	E-2
Unbalanced Force Reactions in Control Valve Plugs and Their Influence on Diaphragm Motor Design and Operation, Part 1, Ralph A. Rockwell	542.3	2	Feb.	1951	C-9
Unbalanced Force Reactions in Control Valve Plugs and Their Influence on Diaphragm Motor Design and Operation, Part 2, Ralph A. Rockwell	542.3	3	Mar.	1951	C-17
Signal Treats Hydraulic Oil, J. C. Albright	546.	7	July	1951	C-107
Continuous Electronic Recording of the Water Content of Oil Field Emulsions, P. O. Engelder	546.1	4	April	1951	B-28
Oil From Alberta Bituminous Sand, W. S. Peterson and P. E. Gishler	553.	4	April	1951	C-66
Micromanometer With Electronic Pick-Up	590.7	4	April	1951	A-68

TRANSPORTATION, STORAGE, AND GAUGING

Economics of the Pipe Line Industry, Frank H. Love	605.	1	Jan.	1951	D-20
Use of Trucks in the Pipe Line Industry, Part 1, Frank H. Love	605.	11	Oct.	1951	D-3
Use of Trucks in the Pipe Line Industry, Part 2, Frank H. Love	605.	12	Nov.	1951	D-12
Many Pipe Lines Proposed for Canada, Harry Chapin Plummer	605.	12	Nov.	1951	D-28
Thirtieth Anniversary H. C. Price Company	605.	12	Nov.	1951	D-36

OIL TRANSPORTATION

Coating Field Joints and Repairing Coatings, W. E. Huddleston	613.33	5	May	1951	D-82
U. S. Tanker Fleet Prospects	614.	6	June	1951	D-20
Tankers for Interprovincial Service, Harry Chapin Plummer	614.	7	July	1951	D-29
Tanker Facilities, Charles Stempf	614.3	4	April	1951	D-26
Western Pipeliners Club, Richard Sneddon	615.	4	April	1951	D-35
Pipe Line Industry's Greatest Year, William C. Kinsolving	615.	5	May	1951	D-7
Clamp for Pipe Welding	615.	10	Sept.	1951	D-36
New Flow Meter	615.1	11	Oct.	1951	A-63
Oil Pipe Line Operating Pressure Practices, F. C. Whiteside	615.2	12	Nov.	1951	D-3
Trans-Arabian Line in Operation, Frank H. Love	615.3	1	Jan.	1951	D-16
Cuyama to Los Angeles Line Now in Operation, Richard Sneddon	615.3	5	May	1951	D-58
Progress on New Iraq Pipe Line, Edmund Updale	615.3	9	Aug.	1951	D-9
Pipe Line Construction Contracts, Richard A. Gump	615.3	12	Nov.	1951	D-69
Use of Barytes on Pipe Lines, Frank H. Love	615.33	6	June	1951	D-26
Development in Coating and Wrapping Pipe, Harry T. Burrows	615.33	9	Aug.	1951	D-25
Internal Pipe Coating Techniques, J. K. Alfred	615.331	1	Jan.	1951	D-26
Hot Applied Coal Tar Coatings, Part 1, N. T. Shideler	615.331	2	Feb.	1951	D-5
Hot Applied Coal Tar Coatings, Part 2, N. T. Shideler	615.331	3	Mar.	1951	D-18
Humble Uses Microwave, Hezzie Clark	615.36	5	May	1951	D-49
New Microwave Relay System, Dale Samuelson	615.36	5	May	1951	D-123
Microwave Communications Systems, W. T. Bulla	615.36	6	June	1951	D-13
Microwave Communications for Pipe Line Use, E. B. Dunn	615.36	11	Oct.	1951	D-20
Design of Mid-Valley Stations, Frank H. Love	615.51	1	Jan.	1951	D-5
Design of Oil Pumping Stations, Frank H. Love	615.51	5	May	1951	D-40
Design of an Unattended Automatic Booster Station, J. P. Hedlin	615.51	8	July	1951	D-49
Diesel Type Engines Operate on Crude Oil, Richard Sneddon	615.511	11	Oct.	1951	D-41
Crankcase Oil Control in Vertical Engines, C. J. Kremer, Jr.	615.512	10	Sept.	1951	D-3
Biggest U. S. Oil Pipeline Pump	615.512.3	10	Sept.	1951	D-38
Application of Pipe Line Control Equipment to Field Operations, H. T. Chilton, Jr.	615.55	13	Dec.	1951	D-18
Diesel Engine Lubricating Oils, E. B. Rawlins	615.6	3	Mar.	1951	D-31
Subsidence Phenomenon Pesters Pipeliners, Richard Sneddon	615.6	7	July	1951	D-24
Diesel Fuel Direct From Crude	615.6	12	Nov.	1951	D-56
How to Determine Correct Lubrication for Engine Cylinder, W. F. Schaphorst	615.6	12	Nov.	1951	D-62
Blending and Heat Solve Heavy Oil Problem, William T. Rintoul	615.6	13	Dec.	1951	D-3
Cold Weather Pipelining, T. S. Johnston	615.6	13	Dec.	1951	D-28
Proper Installation and Care of Anti-Friction Bearings, W. F. Schaphorst	615.63	1	Jan.	1951	D-39
Converting Crude Lines to Products Service, Earl W. Unruh	615.63	8	July	1951	D-3
Electrical Resistivity of Coatings, Walter F. Rogers	615.635	3	Mar.	1951	D-5
Corrosion Mitigation Viewed by Management, H. H. Anderson	615.635	4	April	1951	D-30
Tulsa Holds Second Short Course	615.635	4	April	1951	D-18
Corrosion Program for a Pipe Line, Marshall E. Parker	615.635	5	May	1951	D-68
Taking Corrosion Measurements, Francis Ringer	615.635	5	May	1951	D-115
Joint Cathodic Protection System	615.635.4	2	Feb.	1951	D-53
Cathodic Protection Technical Practices	615.635.4	7	July	1951	D-9
The Rational Approach to Cathodic Protection, Marshall E. Parker	615.635.4.	10	Sept.	1951	D-14
Minimizing Pump Station Fire Hazards, P. D. Phillips and F. O. Stivers	615.64	12	Nov.	1951	D-66
How to Determine Truck Battery Requirements, J. E. Vaughan	615.9	12	Nov.	1951	D-6

Author— Page

Anonymous
Vol. 23, No. 12 B-78
Vol. 23, No. 12 B-96
Vol. 23, No. 12 B-99
Vol. 23, No. 12 B-107
Vol. 23, No. 12 C-38
Vol. 23, No. 12 D-20
Vol. 23, No. 12 D-36
Vol. 23, No. 12 D-56
Vol. 23, No. 13 B-79
Armstrong, J. B.
Vol. 23, No. 8 C-20
Arnold, M. L.
Vol. 23, No. 9 D-14

B

Bachman, William S.
Vol. 23, No. 2 B-36
Bailey, J. R.
Vol. 23, No. 13 B-50
Baker, D. R.
Vol. 23, No. 4 C-76
Baker, Hines H.
Vol. 23, No. 8 A-35
Barkis, Bruce
Vol. 23, No. 12 B-54
Bauer, Robert D.
Vol. 23, No. 13 C-26
Bean, Howard S.
Vol. 23, No. 12 C-15
Beard, J. H.
Vol. 23, No. 8 C-42
Benish, Joe
Vol. 23, No. 7 C-5
Bercher, J. W. J.
Vol. 23, No. 6 D-5
Berglund, John H.
Vol. 23, No. 1 A-39
Boberg, Irving E.
Vol. 23, No. 7 D-31
Boice, John E.
Vol. 23, No. 9 D-27
Bowes, Vincent E.
Vol. 23, No. 5 C-5
Bowlby, S. F.
Vol. 23, No. 11 A-51
Briggs, Frank
Vol. 23, No. 5 B-7
Bright, Gordon S.
Vol. 23, No. 2 C-38
Brooke, Maxey
Vol. 23, No. 4 C-38
Brownscombe, E. R.
Vol. 23, No. 2 B-7
Bulla, W. T.
Vol. 23, No. 6 D-13
Bulow, C. L.
Vol. 23, No. 10 C-5
Burba, J. L., Jr.
Vol. 23, No. 10 B-73
Burrows, Harry T.
Vol. 23, No. 9 D-25
Bussa, H. I.
Vol. 23, No. 13 B-7

C

Caldwell, J. A.
Vol. 23, No. 3 B-58
Campbell, Arnold
Vol. 23, No. 3 B-64
Campbell, John L. P.
Vol. 23, No. 6 B-7
Cardwell, W. T., Jr.
Vol. 23, No. 11 B-84
Carter, Lee S.
Vol. 23, No. 12 B-60
Chapman, C. T.
Vol. 23, No. 4 D-9
Chapple, Bennett S., Jr.
Vol. 23, No. 10 A-56
Charls, J., Jr.
Vol. 23, No. 4 C-40
Vol. 23, No. 5 C-11
Chilton, Ernest G.
Vol. 23, No. 10 B-45
Chilton, H. T., Jr.
Vol. 23, No. 13 D-18
Chittum, J. F.
Vol. 23, No. 11 B-84
Chu, Ju Chin
Vol. 23, No. 3 C-9
Clark, Hezzie
Vol. 23, No. 5 D-49
Clark, R. W , Jr.
Vol. 23, No. 10 B-7
Clason, C. E.
Vol. 23, No. 11 B-53
Clevenger, O. L.
Vol. 23, No. 5 C-21
Cochrane, H. G.
Vol. 23, No. 2 A-35
Coulter, Carl J.
Vol. 23, No. 5 D-52
Cozzens, F. R.
Vol. 23, No. 7 B-35
Crowley, M. J., Jr.
Vol. 23, No. 9 C-26
Cullman, A. A.
Vol. 23, No. 8 D-36

Author— Page

D

Danielson, G. Otis
Vol. 23, No. 6 B-14
Davis, Richard L.
Vol. 23, No. 8 C-54
Dawson, D. D., Jr.
Vol. 23, No. 10 B-73
Dean, M. R.
Vol. 23, No. 10 C-18
Dewees, E. J.
Vol. 23, No. 1 B-7
Dinger, W. C.
Vol. 23, No. 7 B-16
Donoghue, David
Vol. 23, No. 3 A-39
Dresser, Harold
Vol. 23, No. 8 C-27
Dunn, E. B.
Vol. 23, No. 11 D-20

E

Echterhoff, J. H.
Vol. 23, No. 8 D-25
Edwards, Roy E.
Vol. 23, No 13 B-40
Eggleston, H. L.
Vol. 23, No. 2 A-40
Egloff, Gustav
Vol. 23, No. 8 E-44
Engelder, P. O.
Vol. 23, No. 4 B-28
Evans, Paul C.
Vol. 23, No. 10 B-60

F

Fagin, K. Marshall
Vol. 23, No. 1 B-62
Vol. 23, No. 3 B-54
Vol. 23, No. 4 B-72
Vol. 23, No. 5 B-38
Vol. 23, No. 6 B-54
Vol. 23, No. 9 B-14
Farrar, G. L.
Vol. 23, No. 6 C-41
Vol. 23, No. 7 C-119
Vol. 23, No. 9 C-11
Finnie, Richard
Vol. 23, No. 5 D-86
Fitzpatrick, J. H.
Vol. 23, No. 12 C-42
Fletcher, C. D.
Vol. 23, No. 9 B-42
Foster, Arch L.
Vol. 23, No. 1 C-27
Vol. 23, No. 1 C-10
Vol. 23, No. 2 C-29
Vol. 23, No. 4 A-41
Vol. 23, No. 4 C-7
Vol. 23, No. 4 C-11
Vol. 23, No. 4 C-24
Vol. 23, No. 4 C-33
Vol. 23, No. 4 C-47
Vol. 23, No. 4 C-53
Vol. 23, No. 9 C-34
Vol. 23, No. 10 C-3
Vol. 23, No. 11 C-3
Vol. 23, No. 11 C-11
Vol. 23, No. 12 C-3
Vol. 23, No. 12 C-22
Vol. 23, No. 13 C-3
Vol. 23, No. 13 C-17
Fowler, Frank C.
Vol. 23, No. 1 C-35
Frame, A. P.
Vol. 23, No. 9 A-53
Franz, William F.
Vol. 23, No. 2 B-60
Frost, E. M., Jr.
Vol. 23, No. 3 B-7
Furth, M. A.
Vol. 23, No. 8 C-3

G

Gilmore, Forrest E
Vol. 23, No. 13 C-26
Gishler, P. E.
Vol. 23, No. 4 C-66
Glenn, E. E , Jr.
Vol. 23, No. 11 B-7
Goins, W. C., Jr.
Vol. 23, No. 10 B-73
Graham, D. W.
Vol. 23, No. 12 B-7
Greenmeyer, Paul A.
Vol. 23, No. 6 B-40
Greve, C. A.
Vol. 23, No. 8 B-72
Gump, Richard A.
Vol. 23, No. 12 D-69

H

Hall, Harold H.
Vol. 23, No. 10 B-68
Harding, Charles L.
Vol. 23, No. 8 E-33

Author— Page

Harris, Thomas P.
Vol. 23, No. 11 B-72
Hawley, Paul F.
Vol. 23, No. 1 B-13
Hay-Roe, Hugh
Vol. 23, No. 11 B-14
Hazel, M. F.
Vol. 23, No. 4 B-16
Heck, E. T.
Vol. 23, No. 8 B-64
Hedlin, J. P.
Vol. 23, No. 8 D-49
Heinemann, H.
Vol. 23, No. 12 C-40
Herbruck, C. G.
Vol. 23, No. 4 D-20
Herold, Stanley C.
Vol. 23, No. 12 B-14
Hildreth, W. W., Jr.
Vol. 23, No. 7 B-7
Hills, J. O.
Vol. 23, No. 6 B-70
Vol. 23, No. 7 B-42
Hornshell, D. T.
Vol. 23, No. 8 B-42
Holmquist, J. L.
Vol. 23, No. 7 B-54
Horne, W. A.
Vol. 23, No. 13 C-11
Huber, T. A.
Vol. 23, No. 4 B-36
Huddleston, W. E.
Vol. 23, No. 5 D-82
Hulcy, D. A.
Vol. 23, No. 2 D-42
Hulse, E. H.
Vol. 23, No. 2 B-12
Huntsinger, Fritz
Vol. 23, No. 3 A-53

J

Jacobson, E. W.
Vol. 23, No. 12 D-46
Jenkins, R.
Vol. 23, No. 11 B-7
Jennings, B. Brewster
Vol. 23, No. 8 E-27
Jennings, L. H.
Vol. 23, No. 8 C-42
Jewell, J. W., Jr.
Vol. 23, No. 5 C-24
Jillson, Willard Rouse
Vol. 23, No. 13 B-11
Johnson, Douglas O.
Vol. 23, No. 8 B-48
Johnson, R L.
Vol. 23, No. 4 C-50
Johnston, T. S.
Vol. 23, No. 13 D-28
Joyce, T. P.
Vol. 23, No. 13 C-11
Judson, Sidney A.
Vol. 23, No. 11 B-104

K

Kalichevsky, V. A.
Vol. 23, No. 8 C-42
Kayser, Paul
Vol. 23, No. 6 D-31
Kelly, Raymond C.
Vol. 23, No. 8 E-19
Kern, Loyd R.
Vol. 23, No. 2 B-7
Kidd, T. W.
Vol. 23, No. 13 B-55
King, C. C.
Vol. 23, No. 5 C-24
King, R. A.
Vol. 23, No. 8 C-14
Kinsolving, William C.
Vol. 23, No. 5 D-7
Kirkbride, C. G.
Vol. 23, No. 8 C-9
Knabe, R. G.
Vol. 23, No. 11 B-14
Kobe, K. A.
Vol. 23, No. 11 C-35
Koenig, C. F., III
Vol. 23, No. 11 D-9
Koenig, E. A.
Vol. 23, No. 11 D-37
Kremer, C. J., Jr.
Vol. 23, No. 10 D-3

L

Larson, C. M.
Vol. 23, No. 1 C-5
Vol. 23, No. 2 C-19
Latimer, T. P.
Vol. 23, No. 8 D-16
Laurence, Lawton
Vol. 23, No. 3 C-25
Lewis, O. L.
Vol. 23, No. 11 C-16
Vol. 23, No. 12 C-5
Liesenmeyer, J. C.
Vol. 23, No. 1 C-20
Livingston, M. M.
Vol. 23, No. 9 B-42

Author— Page

Lloyd, F. T.
Vol. 23, No. 11 B-92
Love, Frank H.
Vol. 23, No. 1 D-5
Vol. 23, No. 1 D-16
Vol. 23, No. 1 D-20
Vol. 23, No. 2 D-12
Vol. 23, No. 4 D-5
Vol. 23, No. 5 D-40
Vol. 23, No. 6 D-26
Vol. 23, No. 7 D-19
Vol. 23, No. 9 D-7
Vol. 23, No. 11 D-3
Vol. 23, No. 11 D-34
Vol. 23, No. 12 D-12
Lubinski, Arthur
Vol. 23, No. 5 B-54

M

MacDonald, G. C.
Vol. 23, No. 5 B-54
Maly, Joe W.
Vol. 23, No. 6 B-28
Martin, James Wellford
Vol. 23, No. 9 B-58
Matheny, Frank
Vol. 23, No. 8 C-49
Mays, W. R.
Vol. 23, No. 13 B-36
McCormick, J. B.
Vol. 23, No. 13 B-62
McElhannon, W. A.
Vol. 23, No. 5 C-21
McGhee, George C.
Vol. 23, No. 13 A-50
Meredith, H. H., Jr.
Vol. 23, No. 8 B-32
Mills, Kenneth N.
Vol. 23, No. 2 B-14
Minckler, R. L.
Vol. 23, No. 8 A-33
Moore, O. H.
Vol. 23, No. 10 D-5
Moore, Philip H.
Vol. 23, No. 7 C-113
Morris, J. I.
Vol. 23, No. 8 B-77
Morris, Mary
Vol. 23, No. 9 A-58
Morton, Tom E.
Vol. 23, No. 6 B-28
Mullins, P. V.
Vol. 23, No. 1 D-36
Murray, C. A.
Vol. 23, No. 8 C-3

N

Norris, H. Lee, Jr.
Vol. 23, No. 12 D-7
Vol. 23, No. 13 D-35
Norton, R. E.
Vol. 23, No. 11 B-40
Nuttall, Edwin D.
Vol. 23, No. 8 D-31

O

Ohlandt, William, Jr.
Vol. 23, No. 11 B-40
Olin, H L.
Vol. 23, No. 6 C-5
Owens, Stanley
Vol. 23, No. 5 D-105

P

Parker, Marshall E.
Vol. 23, No. 5 D-68
Vol. 23, No. 10 D-14
Patterson, J. S.
Vol. 23, No. 6 C-5
Pedretti, J. P.
Vol. 23, No. 13 B-30
Perkins, H. W.
Vol. 23, No. 4 B-60
Peterson, W. S.
Vol. 23, No. 4 C-66
Phillips, P. D.
Vol. 23, No. 12 D-66
Pierce, Raymond T.
Vol. 23, No. 1 A-39
Piper, Allan Lacey
Vol. 23, No. 5 D-102
Plummer, Harry Chapin
Vol. 23, No. 7 D-5
Vol. 23, No. 7 D-29
Vol. 23, No. 9 C-5
Vol. 23, No. 10 C-31
Vol. 23, No. 10 D-32
Vol. 23, No. 11 C-24
Vol. 23, No. 12 D-28
Vol. 23, No. 13 C-5
Poettmann, Fred H.
Vol. 23, No. 10 C-18
Pogue, Joseph E.
Vol. 23, No. 9 A-43
Vol. 23, No. 10 A-46
Power, Harry H.
Vol. 23, No. 7 A-33

TITLE OF ARTICLE AND AUTHOR	Decimal No.	No.	Mo.	Year	Page
PRODUCTS AND MANUFACTURE					
Continuous Moulding of Paraffin Wax, L. H. Jennings, J. H. Beard, and V. A. Kalichevsky	755.	8	July	1951	C-42
Coker Solves Heavy Fuel Problem, Arch L. Foster	757.	4	April	1951	C-53
Method of Calculation for High Purity Fractionation, Frank C. Fowler	758.	1	Jan.	1951	C-35
New Horizons of Grease Research, Gordon S. Bright	758.	2	Feb.	1951	C-38
Outstanding Petrochemical Plant in England, V. S. Swaminathan	759.6	2	Feb.	1951	C-5
POWER PLANT AND POWER DISTRIBUTION					
Motor Selection for Hazardous Locations, J. C. Linsenmeyer	762.4	1	Jan.	1951	C-20
TESTING AND RESEARCH LABORATORIES					
Research in the Modern Manner, Richard Sneddon	765.	1	Jan.	1951	E-1
Electrolytic Conductivity Measurements, Robert Tobi	765	7	July	1951	C-13
Laboratory Testing Controls	765	9	Aug.	1951	C-43
Short Cuts in Pilot Plant Engineering, J. C. Rearick	765.	12	Nov.	1951	C-44
Pilot Plant Design, B. M. Wedner, W. A. Horne, and T. P. Joyce	765.2	13	Dec.	1951	C-11
MISCELLANEOUS AUXILIARY PLANTS AND DEPARTMENTS					
Chemical Treating Plant for Refinery Waste Water, H. Schindler	769.6	8	July	1951	C-36
Water Conservation, Raymond C. Kelly	769.6	8	July	1951	E-19
Water Cooling Equipment, Harold Dresser	769.6	8	July	1951	C-27
Delignification of Redwood Cooling Tower, Maxey Brooke	769.61	4	April	1951	C-38
Wood Deterioration in Cooling Towers, D. R. Baker	769.61	4	April	1951	C-76
Examination of Basic Factors Underlying Design and Operation of Cooling Towers, G. L. Farrar	769.61	7	July	1951	C-119
PHYSICAL AND CHEMICAL PROPERTIES OF HYDROCARBON VAPORS AND GASES					
Phase Behavior of Hydrocarbon Systems, M. R. Dean and Fred H. Poettmann	771.	10	Sept.	1951	C-18
The Wohl Equation of State Applied to Light Hydrocarbons, K. A. Kobe and H. E. von Rosenberg	771.	11	Oct.	1951	C-35
Determination of Hydrocarbon Liquid-Vapor Equilibria, G. L. Farrar	771.3	6	June	1951	C-41
COMPRESSION AND REFRIGERATION PROCESS FOR EXTRACTION OF NATURAL GASOLINE FROM GAS					
High Sulfur Gas Handled Efficiently, Arch L. Foster	772.1	4	April	1951	C-7
Centrifugal Compressors in Petroleum Engineering, Part 1	772.311.	3	Mar.	1951	C-32
Centrifugal Compressors in Petroleum Engineering, Part 2	772.311	4	April	1951	C-18
RECOVERY OF LIQUIDS FROM GAS					
Design of Gasoline Plants, Part 2, O. L. Lewis	773.	12	Nov.	1951	C-5
Kermit Plant Built for Present and Future, Arch L. Foster	773.1	4	April	1951	C-24
Design of Gasoline Plants, Part 1, O. L. Lewis	773.11	11	Oct.	1951	C-16
Gasoline Plant Absorber Performance, R. A. King	773.7	8	July	1951	C-14
Testing Natural Gasoline Plant Operating Efficiency, J. B. Armstrong	773.7	8	July	1951	C-20
More LPG for Motor Fuel, NGAA Told, Arch L. Foster	775.	1	Jan.	1951	C-40
CORROSION IN REFINERY EQUIPMENT AND METHODS OF MINIMIZING DESTRUCTION DUE TO CORROSION					
Corrosion-Prevention in a TCC Gas Plant, C. A. Murray and M. A. Furth	791.	8	July	1951	C-3
UTILIZATION OF PETROLEUM AND ITS PRODUCTS					
Canadians to Study Petroleum Uses in Arctic Areas	800.	4	April	1951	C-74
Small Gas Turbine Has Wide Power Potential	807.	11	Oct.	1951	A-68
Lubrication of Refinery Equipment, Part 1, C. M. Larson	830.	1	Jan.	1951	C-5
Lubrication of Refinery Equipment, Part 2, C. M. Larson	830.	2	Feb.	1951	C-19
Oil Film Thickness Indicators for Sleeve-Type Bearings	835.	11	Oct.	1951	A-55
New Sulfur Recovery Process	877.8	2	Feb.	1951	C-44
ECONOMICS OF THE OIL AND GAS INDUSTRY					
What's Wrong With Being an Oil Company, Ernestine Adams	900.	4	April	1951	A-58
The Oil Problem in the Middle East, George C. McGhee	900.	13	Dec.	1951	A-50
Export Markets for Alberta's Gas, H. G. Cochrane	902.113	2	Feb.	1951	A-35
One-Third of Income for Exploration, H. J. Struth	910.	5	May	1951	A-49
Trucks and Cars in Oil Industry Increase	910.	11	Oct.	1951	B-107
Lube Refining Capacity 177,000	913.4	9	Aug.	1951	C-9
Industry Smoothly Meets Record Demand, Ernestine Adams	926.	6	June	1951	A-39
The Engineer's Place in Management, S. F. Bowlby	934.	11	Oct.	1951	A-51
The Possibilities of Mercury Poisoning in Instrument Shops, Robert F. Angell	934.314	2	Feb.	1951	C-18
Pipe Racks and Safe Handling of Pipe	934.314	11	Oct.	1951	B-58
Training Men for Drilling Fluid Work, W. R. Mays	934.35	13	Dec.	1951	B-36
Human Relations, H. L. Eggleston	935.	2	Feb.	1951	A-40
Wanted: A Better Definition for "Friction," W. F. Schaphorst	936.	5	May	1951	C-36
Chemical Circulation Cleaning of Towers, Vincent E. Bowes	937.2	5	May	1951	C-5
How to Estimate Crude Oil Reserves by Decline Trend Method, R. W. Clark, Jr.	951.1	10	Sept.	1951	B-7
The Future Supply of Natural Gas. Lyon F. Terry	952.	8	July	1951	A-48
Middle East Oil Developments, Charles L. Harding	972.	8	July	1951	E-33
Strategic Oil Supplies, Gustav Egloff	972.	8	July	1951	E-44
Status of Russian Petroleum Industry	972.	13	Dec.	1951	B-79
Observations of a "WOC," A. P. Frame	980.	9	Aug.	1951	A-53
Oil in Troubled Waters, Ernestine Adams	980.	10	Sept.	1951	A-39
Freedom Is Industry's Need	980.	11	Oct.	1951	A-54
Tax Policy and Petroleum Supplies, Hines H. Baker	982.	8	July	1951	A-35
How to Get Your Priority Rating for Tubular Goods	989.1	4	April	1951	A-53
The Importance of Technology in Developing Oil Production, C. E. Reistle, Jr.	991.	13	Dec.	1951	A-37
The Historian Looks at Oil, Carl Coke Rister	991.1	8	July	1951	A-29
Petroleum and the National Emergency, Howard G. Vesper	991.3	5	May	1951	A-64

AUTHOR INDEX

Author—	Page
A	
Abendroth, G. F. Vol. 23, No. 4	B-36
Abraham, William E. V. Vol. 23, No. 3	A-56
Adams, Ernestine Vol. 23, No. 4	A-58
Vol. 23, No. 6	A-39
Vol. 23, No. 10	A-39
Vol. 23, No. 12	B-71
Albright, J. C. Vol. 23, No. 2	B-32
Vol. 23, No. 2	C-31
Vol. 23, No. 3	B-52
Vol. 23, No. 5	B-52
Vol. 23, No. 7	C-107
Vol. 23, No. 10	B-84
Vol. 23, No. 12	C-34
Alfred, J. K. Vol. 23, No. 1	D-26
Allen, T. O. Vol. 23, No. 4	B-36
Anderson, H. H. Vol. 23, No. 4	D-30
Angell, Robert F. Vol. 23, No. 2	C-18
Vol. 23, No. 6	C-23
Anonymous Vol. 23, No. 2	A-50
Vol. 23, No. 2	C-35
Vol. 23, No. 2	C-44
Vol. 23, No. 2	D-50
Vol. 23, No. 2	D-53
Vol. 23, No. 2	D-61
Vol. 23, No. 3	C-32
Vol. 23, No. 3	D-26
Vol. 23, No. 4	D-38
Vol. 23, No. 4	A-53
Vol. 23, No. 4	A-68
Vol. 23, No. 4	B-73
Vol. 23, No. 4	B-77
Vol. 23, No. 4	C-18
Vol. 23, No. 4	C-74
Vol. 23, No. 4	C-82
Vol. 23, No. 4	D-18
Vol. 23, No. 4	D-44
Anonymous Vol. 23, No. 5	B-70
Vol. 23, No. 5	B-81
Vol. 23, No. 6	D-128
Vol. 23, No. 6	B-81
Vol. 23, No. 6	B-87
Vol. 23, No. 6	C-18
Vol. 23, No. 6	C-36
Vol. 23, No. 6	C-48
Vol. 23, No. 6	C-56
Vol. 23, No. 6	D-20
Vol. 23, No. 7	B-74
Vol. 23, No. 7	B-80
Vol. 23, No. 7	C-16
Vol. 23, No. 7	C-123
Vol. 23, No. 7	D-9
Vol. 23, No. 7	D-34
Vol. 23, No. 8	B-100
Vol. 23, No. 8	C-48
Vol. 23, No. 8	C-53
Vol. 23, No. 9	B-67
Vol. 23, No. 9	C-9
Vol. 23, No. 9	C-21
Vol. 23, No. 9	C-43
Anonymous Vol. 23, No. 9	C-44
Vol. 23, No. 9	C-46
Vol. 23, No. 9	C-47
Vol. 23, No. 9	D-31
Vol. 23, No. 9	D-34
Vol. 23, No. 10	B-88
Vol. 23, No. 10	B-90
Vol. 23, No. 10	D-36
Vol. 23, No. 10	D-38
Vol. 23, No. 10	D-40
Vol. 23, No. 11	A-54
Vol. 23, No. 11	A-55
Vol. 23, No. 11	A-63
Vol. 23, No. 11	A-68
Vol. 23, No. 11	B-58
Vol. 23, No. 11	B-107
Vol. 23, No. 11	C-22
Vol. 23, No. 11	C-34
Vol. 23, No. 11	C-44
Vol. 23, No. 11	D-48
Vol. 23, No. 11	D-51
Vol. 23, No. 12	A-33
Vol. 23, No. 12	B-12

TITLE OF ARTICLE AND AUTHOR	Decimal No.	No.	Mo.	Year	Page
River Crossing Construction, F. Hill Sanders, Jr.	615.91	10	Sept.	1951	D-20
Installing Hudson River Crossing Frank H. Love	615.91	11	Oct.	1951	D-34
Short Line May Also Present Complex Operations, Richard Sneddon	615.92	5	May	1951	D-122
Tacagua Products Pipe Line, Harry Chapin Plummer	615.92	7	July	1951	D-5
Pipe Line Movement of LPG, D. A. Roach	615.92	8	July	1951	D-11
Products Pipe Lines in Transportation, John E. Boice	615.92	9	Aug.	1951	D-27
Sarnia-Toronto Pipe Line, Harry Chapin Plummer	615.92	10	Sept.	1951	D-32
Developments in Products Pipe Line Technology, J. R. Shipley	615.92	13	Dec.	1951	D-11
New Pacific Coast Deep Water Terminal, Allan Lacey Piper	615.93	5	May	1951	D-102

GAS TRANSPORTATION

Removal of Nitrogen From Natural Gas, P. V. Mullins	620.	1	Jan.	1951	D-36
Transcontinental—Longest Gas Line, Frank H. Love	620.	2	Feb.	1951	D-12
Application of Centrifugal Gas Compressors, C. T. Chapman	620.	4	April	1951	D-9
Designing and Building Safety Into Large Gas Pipe Lines, Stanley Owens	620.	5	May	1951	D-105
Natural Gas in Relation to National Defense, Paul Kayser	620.	6	June	1951	D-31
Experience in Dampening Pulsations in Compressor Piping Systems, M. L. Arnold	620.	9	Aug.	1951	D-14
Vast Expansion Program Underway	620.	11	Oct.	1951	D-48
Useful Dispatching Tools, Edwin D. Nuttall	620.61	8	July	1951	D-31
Marine Studies for Off-Shore Pipe Lines	620.91	3	Mar.	1951	D-38
Hidden Arc Welding of High Pressure Piping, C. G. Herbruck	622.	4	April	1951	D-20
Computing Gas Pipe Lines, J. F. Voorwijk	622.	13	Dec.	1951	D-7
Submerged Arc Welding of Pipe on the Line, Frank H. Love	622.32	9	Aug.	1951	D-7
El Paso Now a Two-System Company, B. Marshall Willis	623.	5	May	1951	D-9
Southern California's Gas Program, Richard Sneddon	623.	5	May	1951	D-97
The World's Biggest Gas Line, Richard Finnie	623.	5	May	1951	D-86
Laying Pipe in Delta Swampland	623.	10	Sept.	1951	D-40
Octane Numbers Show Downward Trend	623.111.	9	Aug.	1951	C-46
Welding High Yield Pipe, Carl J. Coulter	623.322	5	May	1951	D-52
Koran Compressor Station, Frank H. Love	624.	4	April	1951	D-5
The Position of Turbo-Machinery in the Gas Industry, T. P. Latimer	624.	8	July	1951	D-16
Centrifugal Compressors for Pipe Lines, C. F. Koenig, III	624.	11	Oct.	1951	D-9
Steam Turbo-Compressor Stations, Part 1, H. Lee Norris, Jr.	624.	12	Nov.	1951	D-7
Steam Turbo-Compressor Stations, Part 2, H. Lee Norris, Jr.	624.	13	Dec.	1951	D-35
Pipe Line Compressor Lubrication and Maintenance, O. H. Moore	625.	10	Sept.	1951	D-5
Safe Operation of Compressor Stations, E. A. Koenig	625.	11	Oct.	1951	D-37
Calculation of Orifice Meter Coefficients, J. W. J. Bercher	625.3	6	June	1951	D-5
Maintaining Compressor Equipment, Frank H. Love	625.4	7	July	1951	D-19
A Pipe Line Goes to Sea	625.91	12	Nov.	1951	D-20
Gas Industry Establishes New Record, D. A. Hulcy	629.	2	Feb.	1951	D-42
Removal of Liquids From Natural Gas Before Entering Pipe Lines, J. H. Echterhoff	629.2	8	July	1951	D-25

OIL STORAGE

Submersible Tank Battery Barge	640.	3	Mar.	1951	D-26
Unitized Compartment Tanks, J. C. Albright	640.25	5	May	1951	B-52
A 10,000-Gal Storage Tank That Is Ready in 10 Minutes, Kenneth L. Treiber	640.33	4	April	1951	A-64
Oil Storage Tank Foundations, Irving E. Boberg	644.	7	July	1951	D-31
Operating Aspects of Gas Storage Accounting, A. A. Cullman	653.	8	July	1951	D-36
Underground Storage for Liquefied Petroleum Gases, Frank Matheny	653.	8	July	1951	C-49

OIL GAUGING TANKS AND THEIR USE

Automatic Gaging, Sampling, and Testing, F. H. Warren	670.	12	Nov.	1951	D-75
Positive Displacement Meters, E. W. Jacobson	670.	12	Nov.	1951	D-46
An Accurate Method for Determining Average Temperatures in Storage Tanks, John H. Berglund and Raymond T. Pierce	670.2	1	Jan.	1951	A-39
Chart for Determining Capacity of Tanks	671.	10	Sept.	1951	D-34
Differential Head Meters Useful to the Petroleum Industry, Howard S. Bean	674.	12	Nov.	1951	C-15

SAMPLING PETROLEUM

A Portable Automatic Sampler, W. E. Roads	676.	8	July	1951	D-42

REFINING AND GAS PROCESSING

Chemists Survey Oil Refining Technology, Arch L. Foster	700.	11	Oct.	1951	C-3
Practical Research Improves Refining Mechanics, W. T. Ziegenhain	700.	12	Nov.	1951	C-55
1950-1951 Make Great Strides in Technology, Arch L. Foster	701.	4	April	1951	A-41
Ethylene, Mother of Chemical Empires, Arch L. Foster	701.1	10	Sept.	1951	C-3
Cost Estimating for Refineries, Robert P. Wilson	701.3	11	Oct.	1951	C-39
Modernization Underway of Scotland Refinery	710.1	4	April	1951	C-82
Fawley Refinery to Open in August (Picture Story)	710.1	6	June	1951	C-36
Winnipeg Refinery Begins Operations, Harry Chapin Plummer	710.1	9	Aug.	1951	C-5
Integrated Processing Keynote of a Modern Refinery, W. T. Ziegenhain	710.1	10	Sept.	1951	C-9
Snyder Gasoline Plant Fed by 850 Wells, Arch L. Foster	716.	12	Nov.	1951	C-22

PROCESSES

Factors Affecting Throughput, P. M. Reynolds	720.3	11	Oct.	1951	C-47
Coastal Refinery Expansion	721.	9	Aug.	1951	C-44
Modernized Refinery Keeps Pace With Technology, Arch L. Foster	721.33	1	Jan.	1951	C-27
New Cat Cracking Record, R. L. Johnson	721.33	4	April	1951	C-50
Studies in Fluidization, H. L. Olin and J. S. Patterson	721.33	6	June	1951	C-5
Flexibility Achieved by Modernization, Arch L. Foster	721.33	11	Oct.	1951	C-11
Refinery Installs Cat Cracking Capacity, Harry Chapin Plummer	721.34	10	Sept.	1951	C-31
Montreal Modernization Doubles Refining Capacity, Harry Chapin Plummer	721.34	11	Oct.	1951	C-24
New Design Features in Cat Cracker, H. K. Wheeler	721.34	11	Oct.	1951	C-5
New Catalytic Reformer Produces Aromatics, Arch L. Foster	721.35	4	April	1951	C-47
66,000 Bbl a Day Platforming Capacity, Arch L. Foster	721.35	4	April	1951	C-33
Twin Air-Lift Thermofor Cat Cracking Units on Stream, Arch L. Foster	721.36	4	April	1951	C-11
Houdriforming a Continuous Process for Reforming Petroleum Naphthas, C. G. Kirkbride	721.37	8	July	1951	C-9
Solvent Refining of Lube Oils, J. C. Albright	721.4	2	Feb.	1951	C-31
Production Line Treating Established, J. C. Albright	725.2	12	Nov.	1951	C-34
New Adsorption Processes for Gas Dehydration, Lawton L. Laurence and Laurance S. Reid	729.3	3	Mar.	1951	C-25
Desalting Crude Oil, Part 1, Arch L. Foster; Part 2, Refinery Staff, Socony-Vacuum Oil Company, Inc., Trenton, Michigan	729.3	9	Aug.	1951	C-34
Alkylation Plant Improvements, D. H. Putney	729.7	6	June	1951	C-27
Sulfuric Acid Alkylation for Gasoline, J. W. Jewell, Jr. and C. C. King	729.71	5	May	1951	C-24

DESIGN AND CONSTRUCTION

Refinery Expansion in England, V. S. Swaminathan	730.	1	Jan.	1951	C-13
Shell's U. K. Refinery Program, V. S. Swaminathan	730.	3	Mar.	1951	C-5
Crankless Engine Nears Production Stage, Richard Sneddon	730.	9	Aug.	1951	C-41
60 Per Cent More Refining Capacity, Arch L. Foster	730.	13	Dec.	1951	C-17
Charts Simplify Refinery Piping Design	731.	7	July	1951	C-16
Hot Water Piping Systems, W. F. Schaphorst	731.	10	Sept.	1951	C-49
The Use of Scale Models in the Petroleum Industry, Marshall Sittig	731.	12	Nov.	1951	C-58
Optimum Insulation Thickness	732.4	2	Feb.	1951	C-35
Insulating While Hot Prevents Expansion Problems	732.4	8	July	1951	C-48
Two Ways to Insulate Flanges, Valves, and Fittings, Richard L. Davis	732.4	8	July	1951	C-54
Insulation and Application for Heated Piping	732.4	11	Oct.	1951	C-44
New Development in Radiant Heating, C. C. Tate	734.11	6	June	1951	C-14
Practical Calculations for Shell-and-Tube Heat Exchangers, G. L. Farrar	734.2	9	Aug.	1951	C-11
Pressure Drop Calculation in Bubble Plate Columns, Ju Chin Chu	734.5	3	Mar.	1951	C-9
Refrigeration in the Petroleum Industry, Part 1, J. Charls, Jr.	737.1	4	April	1951	C-40
Refrigeration in the Petroleum Industry, Part 2, J. Charls, Jr.	737.1	5	May	1951	C-11
Ultra Modern Canadian Lubricant Plant, Harry Chapin Plummer	738.	13	Dec.	1951	C-5
Gas Plants for Catalytic Cracking Units, Forrest E. Gilmore and Robert D. Bauer	739.3	13	Dec.	1951	C-26
Mechanical Seals for Centrifugal Pumps, D. R. Rankin	739.6	10	Sept.	1951	C-13

REFINERY OPERATION AND CONTROL

The Instrument Department Grows Up, Robert F. Angell and Robert Tobi	740.	6	June	1951	C-23
Recent Improvements on the Grease Consistometer	747.	9	Aug.	1951	C-47
Flare Stack Ignition Devices, O. L. Clevenger and W. A. McElhannon	749.2	5	May	1951	C-21
Selection of Electric Motor Controls, Joe Benish	749.4	7	July	1951	C-5
Wheatstone Bridge in Cooling Tower Control, M. J. Crowley, Jr.	749.5	9	Aug.	1951	C-26

NAPHTHAS

What's the Trouble With Caustic Regenerative Gasoline Treating, C. W. Rippie	751.2	7	July	1951	C-127
New Adsorption Process Recovers Aromatics	751.4	9	Aug.	1951	C-21
Houdriforming for Aromatics, H. Heinemann, J. W. Schall, and D. H. Stevenson	751.4	12	Nov.	1951	C-40

Author— Page

Pugh, W. E.
Vol. 23, No. 11 B-78
Putney, D. H.
Vol. 23, No. 6 C-27

R

Rankin, D. R.
Vol. 23, No. 10 C-13
Rawlins, E. B.
Vol. 23, No. 3 D-31
Rearick, J. C.
Vol. 23, No. 12 C-44
Reed, J. A., II
Vol. 23, No. 8 B-32
Reid, Laurance S.
Vol. 23, No. 3 C-25
Reistle, C. E., Jr.
Vol. 23, No. 13 A-37
Reynolds, P. M.
Vol. 23, No. 11 C-47
Ringer, Francis
Vol. 23, No. 5 D-115
Rintoul, William T.
Vol. 23, No. 13 D-3
Ripple, C. W.
Vol. 23, No. 7 C-127
Rister, Carl Coke
Vol. 23, No. 8 A-29
Roach, D. A.
Vol .23, No. 8 D-11
Roads, W. E.
Vol. 23, No. 8 D-42
Rockwell, Ralph A.
Vol. 23, No. 2 C-9
Vol. 23, No. 3 C-17
Rogers, Walter F.
Vol. 23, No. 3 D-5
Rose, Walter
Vol. 23, No. 11 B-14
Rowland, L. O.
Vol. 23, No. 1 B-51
Vol. 23, No. 4 A-62

S

Samuelson, Dale
Vol. 23, No. 5 D-123
Sanders, F. Hill
Vol. 23, No. 10 D-20
Schabarum, Bruno
Vol. 23, No. 13 B-16
Schall, J. W.
Vol. 23, No. 12 C-40
Schaphorst, W. F.
Vol. 23, No. 1 D-39

Author— Page

Vol. 23, No. 5 C-36
Vol. 23, No. 10 C-49
Vol. 23, No. 10 D-34
Vol. 23, No. 12 D-62
Schindler, H.
Vol. 23, No. 8 C-36
Shideler, N. T.
Vol. 23, No. 2 D-5
Vol. 23, No. 3 D-18
Shipley, J. R.
Vol. 23, No. 13 D-11
Shock, D. A.
Vol. 23, No. 8 B-86
Shumate, H. J.
Vol. 23, No. 12 B-81
Simmons, E. J.
Vol. 23, No. 3 B-68
Sittig, Marshall
Vol. 23, No. 12 C-58
Smith, Dwight K.
Vol. 23, No. 4 B-7
Smith, R. V.
Vol. 23, No. 1 B-7
Sneddon, Richard
Vol. 23, No. 1 E-1
Vol. 23, No. 4 D-35
Vol. 23, No. 5 B-13
Vol. 23, No. 5 D-58
Vol. 23, No. 5 D-97
Vol. 23, No. 5 D-122
Vol. 23, No. 7 B-60
Vol. 23, No. 7 D-24
Vol. 23, No. 9 B-7
Vol. 23, No. 9 C-41
Vol. 23, No. 10 B-36
Vol. 23, No. 11 B-63
Vol. 23, No. 11 D-41
Vol. 23, No. 12 B-42
Stach, Leo W.
Vol. 23, No. 6 A-48
Standing, M. B.
Vol. 23, No. 11 B-84
Stempf, Charles
Vol. 23, No. 4 D-26
Sterrett, Elton
Vol. 23, No. 6 B-48
Stevenson, D. H.
Vol. 23, No. 12 C-40
Stivers, F. O.
Vol. 23, No. 12 D-66
Struth, H. J.
Vol. 23, No. 5 A-49
Sudbury, J. D.
Vol. 23, No. 8 B-86
Swaminathan, V. S.
Vol. 23, No. 1 C-13
Vol. 23, No. 2 C-5
Vol. 23, No. 3 C-5

Author— Page

T

Tate, C. C.
Vol. 23, No. 6 C-14
Teague, J. U.
Vol. 23, No. 13 B-73
Teplitz, A. J.
Vol. 23, No. 10 B-73
Terry, Lyon F.
Vol. 23, No. 8 A-48
Thompson, Ernest O.
Vol. 23, No. 13 A-33
Thompson, Fred D.
Vol. 23, No. 6 B-50
Tobi, Robert
Vol. 23, No. 6 C-23
Vol. 23, No. 7 C-13
Tomlinson, G. W.
Vol. 23, No. 12 B-88
Toomey, David F.
Vol. 23, No. 10 B-45
Torrey, Paul D.
Vol. 23, No. 1 B-36
Vol. 23, No. 8 E-2
Towse, Donald F.
Vol. 23, No. 12 A-49
Travers, W. J.
Vol. 23, No. 11 B-92
Treiber, Kenneth L.
Vol. 23, No. 4 A-64
Tunnell, F. M.
Vol. 23, No. 11 B-14
Turner, Marshall C.
Vol. 23, No. 9 B-35

U

Unruh, Earl W.
Vol. 23, No. 8 D-3
Updale, Edmund
Vol. 23, No. 9 D-9
Uren, Lester C.
Vol. 23, No. 1 A-47

V

Van Wingen, N.
Vol. 23, No. 8 B-11
Vaughan, J. E.
Vol. 23, No. 12 D-6
Vaughn, J. C.
Vol. 23, No. 8 B-64

Author— Page

Vesper, Howard G.
Vol. 23, No. 5 A-64
Vick, F. B.
Vol. 23, No. 13 B-7
von Rosenberg, H. E.
Vol. 23, No. 11 C-35
Voorwijk, J. F.
Vol. 23, No. 13 D-7

W

Walstrom, John E.
Vol. 23, No. 2 B-52
Vol. 23, No. 3 B-35
Warren, F. H.
Vol. 23, No. 12 D-75
Watson, Robert A.
Vol. 23, No. 6 B-63
Wedner, B. M.
Vol. 23, No. 13 C-11
Weichert, J. P.
Vol. 23, No. 10 B-73
Wells, Norman C.
Vol. 23, No. 5 B-48
Vol. 23, No. 11 B-48
Wheeler, H. K.
Vol. 23, No. 11 C-5
Whitaker, E. J.
Vol. 23, No. 8 B-42
Whiteside, F. C.
Vol. 23, No. 12 D-3
Williams, R. H.
Vol. 23, No. 1 B-7
Willis, B .Marshall
Vol. 23, No. 5 D-9
Wilson, Robert P.
Vol. 23, No. 11 C-39
Wilson, W. A.
Vol. 23, No. 5 B-76
Wright, John C.
Vol. 23, No. 8 B-3

Y

York, A. E.
Vol. 23, No. 11 A-58
Young, Y. C.
Vol. 23, No. 10 C-40

Z

Ziegenhain, W. T.
Vol. 23, No. 10 C-9
Vol. 23, No. 12 C-55

age

-64
B-7
-35
D-7

3-52
3-35
)-75
3-63
C-11
3-73
3-48
3-48
C-5
B-42
D-3
B-7
D-9
C-39
B-76
B-3

A-58
C-40

C-9
C-55